

L 10313-67 EWT(m)/EWP(k)/EWP(t)/ETI IJP(c) JD/JH
ACC NR: AR6013847 (A, N) SOURCE CODE: UR/0276/65/000/011/G015/G015

AUTHORS: Lovtsov, D. P.; Volkhontsev, I. B. 36

TITLE: Degassing of aluminum and aluminum-silicon alloys during storage 27

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya, Abs. 11G127

REF SOURCE: Sl. Lit'ye i obrabotka splavov chern. i tsvetn. met. Krasnoyarsk, 1965, 67-78

TOPIC TAGS: aluminum alloy, aluminum, vacuum degassing/ AV000 aluminum, AL-7-4 aluminum alloy, AL-2 aluminum alloy, AL-4 aluminum alloy

ABSTRACT: An investigation has established that aluminum (AV000) and aluminum-silicon alloys (which have previously been hydrogenated) will degas while standing under essentially atmospheric conditions at 745--755C. The hydrogen degassing rate during standing depends on the kind of metal, the temperature, the degree of contamination with metallic, nonmetallic, and gaseous impurities, on the structure and properties of the surface layer, and on the humidity of the environment. Alloys with increasing degassing rates can be arranged as follows: AL-7-4, AL-2, AL-4, AV000. 5 tables. Bibliography of 10 titles. [Translation of abstract]

Card 1/1 SUB CODE: 13, 11 20. UDC: 621.745:669.715

VOLKHOV, A. A.

Postnatal development of animals and man. Usp.sovr.biol. 43 no.3:
364-370 My-Je '57. (MLRA 10:7)
(PRAGUE--PHYSIOLOGY--CONGRESSES)

VOLKHOV, I.M.; IVANOV, V.M.; KUZNETSOV, Yu.A.; otv. red.;
KOPOLEVSKAYA, B.N., red.; OVCHINNIKOVA, T.K., tekhn.red.

[Lysaya gabbro-pyroxenite-dunite intrusive complex in the
Western Sayan Mountains] Lysogorskii gabbro-piroksenit-
dunitovoi [sic] intruzivnyi kompleks Zapadnogo Saiana.
Otv. red. I.U.A.Kuznetsov. Novosibirsk, Izd-vo Sibirskogo
otd-niia AN SSSR, 1963. 99 p. (MIRA 16:11)

1. Chlen-korrespondent AN SSSR (for Kuznetsov).
(Sayan Mountains--Geology)

VOLKHOV, M.I., LEONT'YEV, O.P.

Electrification of mine dusts and its determination. Vest. AN
Kazakh. SSR 13 no.4:86-90 Ap '57. (MLRA 10:6)
(Mine dusts)

VOLKHOV, V.F.; SHUBIN, L.N.

Shoes for cables with a cross section up to 800 mm^2 . Pats. predl.
na gor. elektrottransp. no.9:63-64 '64.

(MIRA 18:2)

1. Upravleniye tramvaya Lipetska.

VOLKHOV, YE.B.

Raketnyye dvigateli. Moscow, Voenizdat, 1961. 58 p. illus., diags.,
graphs, tables.

On cover: Za voyenno-tekhnicheskiye Znananiye.

VOLKHOVA, N.A.

Changes in the temperature reaction to pyrogens in total body X-irradiation of rabbits. Med.rad. 1 no.4:25-30 J1-Ag '56. (MLRA 9:12)

1. Iz otdela obshchey patologii (zav. - chlen-korrespondent AMN SSSR prof. P.N.Veselkin) Instituta eksperimental'noy meditsiny AMN SSSR.

(ROENTGEN RAYS, eff.

on temperature reaction to pyrogens in rabbits)

(BODY TEMPERATURE, eff. of drugs on

changes in reaction to pyrogens, changes induced by x-irradiation in rabbits)

(PYROGENS, eff.

on body temperature in rabbits, reaction changes induced by x-irradiation)

IOTKOVSKIY, A. (Leningrad); KARASEV, I. (Leningrad); VOLKHOVER, G.
(Leningrad)

Don't forget about economics. Sov. torg. 35 no.3:34-36 Kr
'62. (MIRA 15:3)

(Vending machines)

MAIKOV, A.M., professor, doktor tekhnicheskikh nauk; FISHER, P.N., redaktor;
VOLKHOVER, R.S., tekhnicheskii redaktor.

[Production of yeast from nonfood substances] Proizvodstvo drozhdzhei iz
nepishchevogo syr⁰ia. Moskva, Goslesbumizdat, 1953. 175 p. (MLRA 7:5)
(Yeast)

MAKOKLIN, I.A.; VERNIDUB, I.I.; ZHVANKO, Yu.N.; KARPOV, V.T.;
RAZUMOVSKAYA, G.S.; VOL'KHOVSKAYA, A.A.

Kinetics of the oxidation of fine magnesium powders at high
temperatures. Zhur.prikl.khim. 33 no.4:824-831 Ap '60.
(MIRA 13:9)

1. Moskovskiy ordena Trudovogo Krasnogo Znameni institut
narodnogo khozyaystva imeni G.V.Plekhanova.
(Magnesium) (Powder metallurgy) (Oxidation)

TARASEVICH, N.I.; MOSELY MECHANED; VOLKHOVSKAYA, R.Kh.

Spectral spark method of analyzing solutions. Vest.Mosk.un.Ser.2:
Khim. 19 no.4:67-71 51-Ag '64. (MIRA 18:8)

1. Kafedra analiticheskoy khimii Moskovskogo universiteta.

VOLKHOVSKAYA, U.V.

Greater attention to growing Spanish jasmine. Masl.-zhir.prom.
18 no.11:18-19 '53. (MLRA 6:12)

1. Sukhumskaya zonal'naya opytnaya stantsiya Vsesoyuznogo
nauchno-issledovatel'skogo instituta sinteticheskikh i natural'-
nykh dushistykh veshchestv. (Jasmine)

VOLKHOVSKAYA, U.V.

Campher laurel as a national source of safrole. Masl.-zhir. prem. 22
no. 4:14-15 '56. (MLRA 9:9)

1. Sukhumskaya zonal'naya stantsiya.
(Essences and essential oils) (Campher tree)

VOVKHOVSKAYA, U.V.

Cultivation of the large-flowered jasmine. Trudy VNIISMD no.3:3-18
(MIRA 10:9)
'57.

1. Starshiy nauchnyy sotrudnik Sukhumskey Zonal'noy opyt'noy stantsii.
(Georgia--Jasmines) (Essences and essential oils)

VOLKHOVSKAYA, V.V.

VOLKHOVSKAYA, U.V., starshiy nauchnyy sotrudnik; AZAREVICH, O.I., starshiy
nauchnyy sotrudnik.

Cultivation of *Eucalyptus citriodora* Hook. Trudy VNIISNDV no.3:29-46
'57. (MLRA 10:9)

1. Sukhumsкая Zonal'naya opytная stantsiya.
(Georgia--Eucalyptus)

VOLKHOVSKAYA, U. V.

USSR / Cultivated Plants. Medicinal Plants. Essential Oil Plants. Toxic Plants.

Abs Jour : Ref Zhur - Biol., No 6, 1956, No 34363

Author : Volkhovskaya, U. V.
Inst : All-Union Research Institute for Synthetic and Natural Perfumes.

Title : Culture of the Large-Flowering Jasmine.

Orig Pub : Tr. Vses. n.i. in-t sint. i natur. dush. veshch., 1957, vyp. 3, 3-18.

Abstract : *Jasminum grandiflorum* or large-flowering jasmine (I) is a perennial scrub of the family Oleaceae. The breed of *Jasminum* includes approx. 200 species, growing in tropical and sub-tropical zones of Asia, Africa, America, Australia and Europe. The most important of these, with respect to the contents in essential oils, is I. In its wild-

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USSR / Cultivated Plants. Medicinal Plants: Essential
Oil Plants. Toxic Plants.

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 34863

growing form, it occurs in India (province of Nepal). In cultivated form, I is known in many countries. The botanical characteristics of I are listed. In the SSSR, the studies on I were started in 1928 by the Sukhumskiy Branch of the VIR. Experiments conducted during 15 years (1928 to 1942) have shown that it is possible to grow root-taking cultures of I in conditions such as those prevailing in Western Georgia (Gruzija). Data pertaining to conditions of cultivation, hibernation, growing and yield are indicated. Freezing of the plant section growing above the soil is observed at minus 80C., however, even then the unaffected sections of the plant, i.e., the stem and the back of the root, are able to produce abundant foliage and blooms in

Card 2/3

—J—83000.

ALEKSEYEVA, Ye.I., kand. sel'khoz. nauk; BUZINOV, P.A., kand. sel'khoz. nauk; VODOLAGIN, V.D.; VOLKHOVSKAYA, U.V.; GLUSHCHENKO, N.N., kand. biol. nauk; GURVICH, N.L., doktor biol. nauk; ZHELEZNOV, P.A., kand. sel'khoz. nauk; KSENDZ, A.T.; LESHCHUK, T.Ya.; LUK'YANOV, I.A., kand. sel'khoz. nauk; MAYCHENKO, Z.G., kand. sel'khoz. nauk; TANASIYENKO, F.S., kand. khim. nauk; ZNAMENSKIY, M.P.; PERSIDSKAYA, K.G.; PODLESNOVA, A.F.; ROGOCHIY, I.Ya.; REZNIKOV, A.R.; SHUL'GIN, G.T.; KHOTIN, A.A., doktor sel'khoz. nauk; LAPSHINA, O.V., red.; MINENKOVA, V.R., red.; MAKHOVA, N.N., tekhn. red.; BALLOD, A.I., tekhn. red.

[Aromatic plants] Efiromaslichnye kul'tury. Moskva, Sel'-khozizdat, 1963. 358 p. (MIRA 16:12)
(Ukraine--Aromatic plants)

USSR / Cultivated Plants. Medicinal. Essential Oil- M-7
Bearing. Toxins.

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6490

Author : Volkhovskaya, U. V.

Inst : Sukhumi Zonal Experimental Station

Title : Methods of Growing Patchouli Seedlings

Orig Pub : Tr. Sukhumsk. zonal'n. opytn. st. efiro-
maslichn. kul'tur, 1957, vyp 2, 45-65

Abstract : The essential oil, which is contained in
leaves of patchouli (Pogostemon patchouli
Pell Saut) - a tropical perennial plant of
the mint family, is utilized by the perfume
industry as a stable fixer. Long stemmed
patchouli sets were received by the Sukhumi
Zonal Experimental Station from the island of
Java in 1932 and from that time on, the

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USSR / Cultivated Plants. Medicinal. Essential Oil- M-7
Bearing. Toxins.

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6492

Author : Volkhovskaya, U. V.; Azarevich, O. I.
Inst : All-Union Sc.-Res. Inst. of Synthetic and
Natural Aromatic Substances

Title : Cultivation of Lemon Eucalyptus

Orig Pub : Tr. Vses. n.-i. in-t sintetich. i
natural'nykh dushistykh veshchestv, 1957,
vyp 3, 29-46

Abstract : The lemongum or lemon eucalyptus (Eucalyptus
citriodora Hook.) is a tall evergreen, rapid
growing tree. It grows normally in Australia,
in New South Wales, on the northern shore
of Queensland. Its essential oil contains
citronellal - an initial product of

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USSR / Cultivated Plants. Medicinal. Essential Oil- M-7
Bearing. Toxins.

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6492

are cut in the spring, for stumps - there
will be scrub. The agricultural engineering
of lemongum developed in the course of
several years at the Sukhumi Zonal Experi-
mental Station, is described. -- L. N.
Korolev

Card 3/3

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VOLKHOVSKAYA, U.V.

Increase the yield of patchouli in Georgia. Masl.-zhir. prom.
24 no.1:35-36 '58. (MIRA 11:3)

1. Sukhumskaya zonal'naya opytnaya stantsiya Vsesoyuznogo nauchno-
issledovatel'skogo instituta sinteticheskikh i natural'nykh dushistykh
veshchestv.

(Georgia--Patchouli)

VOLKHOVSKAYA, Z.S. (Moskva)

Acute hypervitaminosis D₂. Sov. med. 24 no.4:126-128 Ap '60.
(MIRA 13:2)
(VITAMINS—D)

VOLKHOVSKIKH, Z. V.

Dissertation: "Anatomical and Physiological Investigations of Certain Decorative Plants in Connection with Their Wintering Abilities." Cand Biol Sci, Inst of Botany imeni V. L. Komarov, Acad Sci, USSR, Moscow, Oct-Dec 53. (Vestnik Akademii Nauk, Moscow, Jun 54)

SO: SUM 318, 23 Dec 1954

TARANOV, R., inzhener; SHEYKO, V., inzhener; VOLKIN, P., (Losino-Petrovsk, Moskovskaya oblast'); FEKHTEL, K.; MIRONENKO, V.; ZUYEV, N.; SHOYKHET, A.

Accounts by participants. Radio no.10:18-20 '56. (MLRA 9:11)

1. Nachal'nik respublikanskogo radiokluba Dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu Moldavskoy SSR (for Zuyev) 2. Starshiy inzhener respublikanskogo radiokluba Dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu Moldavskoy SSR (for Shovkhet).

(Radio, Shortwave--Competitions)

VOLKIND, A.Ya.

Demulsification of tar water at the Shchekino Gas Plant.

Gaz. prom. no.11:20-24 N '58.

(MIRA 11:11)

(Coal tar products)

(Emulsions)

VOIKIND, I.

New bath for the production of sodium (from "Chemical Week" no. 6,
1956). TSvet. met. 30 no.2:96 F '57. (MIRA 10:4)
(Sodium) (United States--Chemical industries)

VOIKIND, I.

136-8-19/21

AUTHOR: Voikind, I.

TITLE: Economic Method of Producing Metallic Zirconium (Ekonomi-
chnyy sposob proizvodstva metallichesкого tsirkoniya)

PERIODICAL: Tsvetnye Metally, 1957, Nr 8, p.90 (USSR)

ABSTRACT: This brief note on commercial production of metallic
zirconium in the USA is based on articles in Chemical Week,
1956, 78, Nr 19, 22 and Nr 22, 92, 94 and in Chemical and
Engineering News, 1956, 34, Nr 33, 3877-3878.

AVAILABLE: Library of Congress.

Card 1/1

VOLKIND, I.L., inzh.; KLEKOVKIN, E.M.; SHUMETOV, G.F., agronom;
KRAVCHENKO, M.M., ekonomist.

Storage for field crops of collective farms and state farms.
Izv. ASiA no.4:54-62 '61. (MIRA 16:11)

VOLKIND, I.L., inzh.; GORSKIY, G.Yu., kand.tekhn.nauk; ZHUCHIN, D.I.,
inzh.; IVANOV, N.M., inzh.; PROZOROVSKIY, G.N., kand.tekhn.
nauk; FELONIN, V.P., inzh.; KLIPPEL', M.S., red. izd-va;
MOCHALINA, Z.S., tekhn. red.

[Agricultural construction in the U.S.S.R. and abroad; modern
level and prospects] Sel'skokhoziaistvennoe stroitel'stvo v
SSSR i za rubezhom; sovremennyyi uroven' i perspektivy. [By]
I.L.Volkind i dr. Moskva, Gosstroizdat, 1962. 122 p.

(MIRA 15:7)

1. Akademiya stroitel'stva i arkhitektury SSSR. Nauchno-
issledovatel'skiy institut sel'skikh zdaniy i sooruzheniy.
(Farm buildings)

VOLKIND, I.V., referent.

Zirconium production in the United States (from "Chemische Industrie"
no. 4, 1958). TSvet. met. 31 no.11:91 N '58. (MIRA 11:12)
(United States--Zirconium)

10(5)5(2,3)

31V/80-32-3-42/13

AUTHORS: Storonkin, A.V., Morachevskiy, A.G., Susarev, M.I., Volkind,
I.Ya., Filatov, I.G.

TITLE: Bibliography (Bibliografiya)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol XXXII, No 3, pp 694-699
(USSR)

ABSTRACT: The article contains the review of 3 books, one of which is a translation from English. The two Soviet books are: "Reference Book for the Equilibrium Between Liquid and Vapor" and "Elastics and Their Inflammability".

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VOLKIND, I.Ya.; CHERTKOV, B.A.

Bibliography. Zhur. prikl. khim. 36 no.5:1165-1168 My '63.
(MIRA 16:8)
(Phosphorus compounds) (Chemical apparatus)

VOLKIND, I.Ya.; CHERTKOV, B.A.

Bibliography. Zhur. prikl. khim. 36 no.5:1165-1168 My '63.
(MIRA 16:8)
(Phosphorus compounds) (Chemical apparatus)

VOLKIND, I.Ya.

"Synthetic washing and cleaning preparations" by G.Stüpel. Reviewed
by I.IA.Volkind. Zhur.prikl.khim. 34 no.7:1651-1652 J1 '61.
(MIRA 14:7)

(Cleaning compounds)
(Stüpel, G.)

VOLKIND, I.Ya., kand.tekhn.nauk

"Action of detergents on the skin" by H.Stupel, A.Szakall. Reviewed
by I.IA. Volkind. Gig. i san. 26 no.5:122-123 My '61. (MIRA 15:4)
(CLEANING COMPOUNDS--PHYSIOLOGICAL EFFECT)
(SKIN--DISEASES) (STUPEL, H.) (SZAKALL, A.)

VOLKIND, I.Ya.

"Electrolytic manufacture of chemicals from salt" by D.W.F.Hardie.
Reviewed by I.IA.Volkind. Zhur.prikl.khim. 34 no.7:1652 J1 '61.
(MIRA 14:7)

(Salt) (Electrolysis)
(Hardie, D.W.F.)

VOLKIND, I.Ya.

"Sodium and potassium" by A.F.Alabyshev and others. Reviewed
by I.IA.Volkind. Zhur.prikl.khim. 33 no.7:1681-1683 J1 '60.
(MIRA 13:7)

(Sodium) (Potassium) (Alabyshev, A.F.)
(Grachev, K.Ya.) (Zaretskiy, S.A.) (Lentratov, M.F.)

VOLKIND, I.Ya.

*Chemical publications, their nature and uses [in English] by
M.G.Mellon. Reviewed by I.IA.Volkind. Zhur.prikl.khim. 33
no.7:1683-1684 J1 '60. (MIRA 13:7)
(Chemistry) (Mellon, M.G.)

VOLKIND, I. Ya., kand. tekhn. nauk

P. Puplett's book "Synthetic detergents." Reviewed by I. Ia.
Volkind. Masl.-zhir.prom. 24 no.11:42 '58. (MIRA 12:1)
(Cleaning compounds) (Puplett, P.)

VOLKIND, I.Ya.

"Handling and uses of the alkali metals" [in English]. Zhur. prikl.
khim. 31 no.10:1615-1616 O '58. (MIRA 12:1)
(Alkali metals)

VOLKIND, I. Ya.

"Ashort guide to chemical literature" by G. M. Dyson. Reviewed
by I. IA. Volkind. Zhur. prikl. khim. 33 no.11:2615 N '60.
(MIRA 14:4)

(Bibliography--Literature)
(Dyson, G. M.)

VOLKIND, I.Ya.

"Practical applications of anodic oxidation of aluminum" [in German]
by W. Huebner and A. Schiltknecht. Reviewed by I.IA. Volkind. Zhur.
prikl. khim. 30 no.11:1723-1724 N '57. (MIRA 11:2)
(Aluminum) (Oxidation, Electrolytic)
(Huebner, W.) (Schiltknecht, A.)

VOLKIND, I. Ya.

VOLKIND, I. Ya., kandidat tekhnicheskikh nauk.

About the book "synthetic washing products" by Helmut Stupel. Reviewed
by I. IA. Volkind. Masl.-zhir. prom. 23 no.2:48 '57. (MIRA 10:4)
(Washing powders) (Stupel, Helmut)

VOLKIND, I.Ya.

"Hydrogen peroxide." W. Schumb, C. Satterfield, R. Wentworth.
Reviewed by I.Ya. Volkind. Zhur.neorg.khim. 1 no.7:1687-1688
J1 '56. (MLRA 9:11)

(Hydrogen peroxide)
(Schumb, W.) (Satterfield, C.) (Wentworth, R.)

V
WOLKIND, N.I.

[Certain peculiarities of the phases of the respiratory cycle in dogs of various types of the nervous system] O nekotorykh osobennostiakh faz dykhatel'nogo tsikla u sobak raznykh tipov nervnoi sistemy. Tr.Fiziol.laborat.Pavlova 16:341-350 '49. (CML 19:1)

1. Of the Institute of Evolutionary Physiology and Pathology of H Higher Nervous Activity imeni Academician I.P.Pavlov of the Academy of Medical Sciences USSR (Director -- Academician L.A.Orbeli).

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VOLKIND, N.I.

[Certain peculiarities of the phases of the respiratory cycle in dogs of various types of the nervous system] O nekotorykh osobennostiakh faz dykhatel'nogo tsikla u sobak raznykh tipov nervnoi sistemy. Tr.Fiziol.laborat.Pavlova 16:341-350 '49. (GML 19:1)

1. Of the Institute of Evolutionary Physiology and Pathology of H Higher Nervous Activity imeni Academician I.P.Pavlov of the Academy of Medical Sciences USSR (Director -- Academician L.A.Orbeli).

VOLKIND, N. I.

WOLKIND N. I.

O nekotorykh osobennostiakh faz dykhatel'nogo tsikla u sobak raznykh tipov nernnoi sistemy. /Certain peculiarities of the phases of the respiratory cycle in dogs of various types of the nervous system/ Tr. Fiziol. laborat. Pavlova 16: 1949 p.341-50.

1. Of the Institute of Evolutionary Physiology and Pathology of Higher Nervous Activity imeni Academician I. P. Pavlov of the Academy of Medical Sciences USSR (Director — Academician L. A. Orbeli).
CML Vol. 19, No. 1 July 1950

VOLKIND, N. I.

WOLKIND N. I.

Ob izmeneniiakh dykhanii vo vremia sna u sobak. ^{Modifications of}
respiration during sleep in dogs/ Tr. Fiziol. laborat. Pavlova
16: 1949 p. 351-59.

1. Of the Institute of Evolutionary Physiology and Pathology of
Higher Nervous Activity imeni Academician I. P. Pavlov of the
Academy of Medical Sciences USSR (Director — Academician
L. A. Orbeli).
GIML Vol. 19, No. 1 July 1950

L 52082-65 EWT(m) Feb DIAAP

ACCESSION NR: AP5015234

UR/0286/65/000/009/0018/0018

AUTHORS: Andreyeva, O. I.; Sukhorukov, S. I.; Volkind, S. N.

TITLE: A method for separating radioactive strontium and yttrium. Class 12, No. 170477

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 18

TOPIC TAGS: strontium, yttrium, radioactivity, ion exchange, ammonium salt, ammonium acetate

ABSTRACT: This Author Certificate presents a method for separating radioactive strontium and yttrium by means of ion exchange with the use of an ammonium salt as an eluent. To separate strontium-89 in quantity and without a carrier, yttrium and strontium are washed with ammonium acetate at the concentrations of 0.4-0.6N and 2N respectively.

ASSOCIATION: Gosudarstvennyy ordena trudovogo krasnogo znameni institut prikladnoy khimii (State Institute of Applied Chemistry of the Order of Workers Red Banner)

SUBMITTED: 16Apr64

ENCL: 00

SUB CODE: GC

NO REF SOV: 000

OTHER: 000

Card 1/1

SEINKEVICH, Nikolay Iosifovich; VOLKIND, Ye., red.

[Concrete, masonry, and reinforced masonry construction]
Betonye, kamennye i armokamennye konstruktsii. Izd.2.,
perer. i dop. Moskva, Nauka i tekhnika, 1964. 312 p.
(MIRA 18:1)

DVORSON, K.; VOL'KIS, S.

With the aid of the activist group. Fin.SSSR 23 no.6:64-65 Je
'62. (MIRA 15:7)

1. Zaveduyushchiy Kuybyshevskim rayonnym finansovym otdelom
Leningrada (for Dvorson). 2. Kontroler-revizor Kontrol'no-
revizionnogo upravleniya ministerstva finansov RSFSR po
Kuybyshevskomu rayonu (for Vol'kis).
(Leningrad--Auditing and inspection)

L 30084-66 EWI(1)/ETC(f) IJP(c) AT

ACC NR: AP6010207

SOURCE CODE: UR/0201/66/000/001/0125/0128

AUTHOR: Yurevich, F. B.; Volk-Levanovich, M. V.

ORG: Institute of Heat and Mass Exchange, AN BSSR (Institut teplo- i massoobmena AN BSSR)

TITLE: Velocity of a plasma jet

SOURCE: AN BSSR. Vestsi. Seryya fizika-tekhnichnykh navuk, no. 1, 1966, 125-128

TOPIC TAGS: plasma jet, plasma velocity, plasma radiation, plasma gun, plasma arc

ABSTRACT: The authors describe the measurement of the velocity of a plasma jet by determining the brightness fluctuations. The plasma was produced at the output of a plasmatron with vertical gas stabilization of the arc, a description of which is given elsewhere (IFZh v. 7, No. 7, 1964). The velocity was measured with a high speed streak camera (SFRO operating in the photorecording mode with mirror rotation of 3000-7500 rpm, corresponding to a linear sweep of 150-375 m/sec. A special template was used to measure the radial velocity distribution. The jet velocity was measured for different plasmatron conditions, with and without a mixing chamber (damper chamber). The results show that the mixing chamber greatly smears out the brightness fluctuations. The obtained plasma velocities and other parameters are

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listed in a table. The results show that the distributions of the velocity on the jet axis are close to the mean values calculated by the heat balance. The radial distribution of the velocity in the jet is steeper for a plasmatron without a mixing chamber than for one with a mixing chamber. When the different velocity profiles are plotted in dimensionless form, they all coincide in form and fit quite well an empirical equation $\bar{W} = -0.4\bar{r}^2 + 1$, where \bar{W} is the ratio of the relative jet velocity at a given radius to the velocity on the axis, and \bar{r} is the ratio of the running radius to the radius of output nozzle. The accuracy of the results is estimated at $\pm 10\%$. Orig. art. has: 2 figures, 2 formulas, and 1 table.

SUB CODE: 20/ SUBM DATE: 01Nov65/ ORIG REF: 004/ OTH REF: 001

Card 2/2

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L 12058-65 ASD(f)-2/AFWL/AEDC(b)/AEDC(a)/AS(mp)-2/AFMDC

ACCESSION NR: AP4047823

S/0170/64/000/010/0098/0101

AUTHOR: Volk-Levanovich, M. V.

TITLE: Temperature measurement of variable current arc by self-reversal lines

SOURCE: Inzhenerno-fizicheskii zhurnal, no. 10, 1964, 98-101

TOPIC TAGS: temperature measurement, spectral filter, arc discharge temperature, electrode, thermodynamic equilibrium/ DKS 1) spectrograph, Fabry Perot standard, DG 2 generator

ABSTRACT: Following the theory of H. Bartels (Z. Phys., 125, 597; 126, 108, 1949; 127, 243; 128, 546, 1950), the temperature of an alternating-current arc between iron electrodes was measured from self-reversal line spectra. According to above theory, the intensity in maximum self-reversal and local thermodynamic equilibrium is expressed by

$$I_{\lambda} = J_{\lambda \text{ max}}(T_{\text{max}}) M_{\infty} Y_{\text{max}}(\rho_{\infty}),$$

where

$$J_{\lambda \text{ max}} = c_1 \lambda^{-5} \exp\left(-\frac{c_2}{\lambda T_{\text{max}}}\right);$$

$$M_{\infty} = (V_i/V_n) V_n;$$

$$Y_{\text{max}} = 0.736 + 0.264 \rho^2.$$

Card 1/2

L 12058-65
ACCESSION NR: APL047823

For the measurements a combination spectrograph DFS-13 was used with a Fabry-Perot standard. The optical density of the standard was measured by comparing it with filters of known optical densities. For this purpose two neutral filters were selected such that in the range 3750-3850 Å their optical density was close to that of the standard. The light source was an arc struck between iron electrodes 3 mm apart from a DG-2 generator source. The no-resonance self-reversal iron lines were selected, and the mean arc temperature was found to be $5380 \pm 270\text{K}$. Measurement errors were less than 4-5%. These results were then compared with estimates from spectral line intensity measurements from iron lines 4100-4300 Å. This method gave a mean value of $5100 \pm 300\text{K}$. The results are in agreement within the experimental error. Orig. art. has: 9 formulas, 2 figures, and 1 table.

ASSOCIATION: Institut teplo-i massobmena AN BSSR g. Minsk (Institute of Heat and Mass Transfer, AN BSSR)

SUBMITTED: 15Jul63

ENCL: 00

SUB CODE: ME, TD

NO REF SOV: 002

OTHER: 003

Card 2/2

VOLKO, G.A.; RIK, G.R.

Energy spectra observed in the passage of beta radiation through various substances. Dokl. AN SSSR 140 no.1045-1047 0 '61.
(MIRA 15:2)

1. Agrofizicheskiy nauchno-issledovatel'skiy institut Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.Lentina.
Predstavleno akademikom V.N.Kondrat'yevym.
(Radioisotopes--Spectra)
(Beta rays)

VOLKOBER, Z. [Wolkober, Z.]; VARGA, I.S.

Preparation of macromolecular herbicides. Vysokom.soed. 5
no.1:139-144 Ja '63. (MIRA 16:1)

1. Nauchno-issledovatel'skiy institut plastmassovoy promyshlen-
nosti, Budapesht.
(Herbicides) (Macromolecular compounds)

VOLKOBOY, M.F., prof.; ZAGANYAYLO, V.O. [Zahaniailo, V.O.]; KOKSHA, N.G.
[Koksha, N.H.]; KISLITSKIY, Ya.P. [Kyslyts'kyi, I.A.P.]

Using meat industry wastes for the production of feeds. Khar.prom.
no.4:55-59 O-D '62. (MIRA 16:1)

1. Ukrainskiy nauchno-issledovatel'skiy institut myasomolochnoy
promyshlennosti Gosplana UkrSSR.
(Feeds)

VOLKOBOY, M. P. dotsent, kandidat biologicheskikh nauk.

Morphology of the oblique external abdominal muscle in some mammals.
Nauk.zap.Kiev.un.8 no.7:309-316 '50 [i.e.'49]. (MLRA 9:10)
(MAMMALS--ANATOMY) (MUSCLES)

VOLKOBOY, M.F., prof.; SHCHERBAN', N.P. [Shcherban', M.P.], kand.veterin.nauk

Differential diagnosis and control of carp diseases due to infestation with the helminths Botriocephalus gowrongensis and Caryophyllaeus fimbriceps. Visnyk sil'hosp.nauky 4 no.8:119-121 Ag '61.
(MIRA 14:7)

1. Ukrainskiy nauchno-issledovatel'skiy institut rybnogo khozyaystva.
(Carp--Diseases and pests)

VOLKOBOY, M. F.

"The Biomorphology of the Rib Walls of the Thorax of Certain Mammals."
Dr Biol Sci, Belotserkov Agricultural Inst, Belaya Tserkov' 1953. (RZhBiol,
No 5, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher
Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55

VOLKOBOY, M. V. (Prof.), SHCHERBAN', N.P. (Cand. of Veterinary Sci.), and
KOVALEVSKIY, V. B., (Veterinary Surgeon)

"Diseases and Pests of Fish" *

*Footnote: Kh. S. Goreglyad. "Bolezni i Vrediteli Ryb."
M., Sel'khozgiz, 1955, 4 thousand copies.

Veterinariya, Vol. 38, No. 6, 1961. p. 58

Volkoby, M. V., and Shcherban', N. P. - Ukrainian Scientific Research
Institute of the Fish Industry.
Kovalevskiy, V. B. - Kiev Oblast' Veterinary Bacteriological
Laboratory.

VOLKOBAY, M.V., prof.; SHCHERBAN', N.P., kand.veter.nauk; KOVALEVSKIY, V.B.,
veter.vrach

About the book "Fish diseases and pests." Veterinariia 38 no.6:
89-90 Je '61. (MIRA 16:6)

1. Ukrainskiy nauchno-issledovatel'skiy institut rybnogo khozyaystva.
(for Volkoboy, Shcherban'). 2. Kiyevskaya oblastnaya veterinarno-bakte-
riologicheskaya laboratoriya (for Kovalevskiy).
(Fishes—Diseases and pests)

VOLKOEHRUN, L.

Conditioning cottonseed. L. Volkoehrun. *Westholms-
Åkerarskylta* Prom. 16, No. 676, 61-5(1945). Conditioned
cottonseed yields better, more uniform oil than seed vary-
ing widely in moisture content. A method is described
for humidifying seed to 10-11% moisture content. Mois-
ture distribution measurements show considerable fluctua-
tion, with 9 to 32% of total moisture contained in the hulls
and 68-91% in the seed itself. Julian F. Smith

27

CA

Conditioning cottonseed. L. Volkobitii. Mashkolno-Zhiroaya Prom. 16, No. 8/6, 64-5(1940).--Conditioned cottonseed yields better, more uniform oil than seed varying widely in moisture content. A method is described for humidifying seed to 10-11% moisture content. Moisture distribution measurements show considerable fluctuation, with 0 to 32% of total moisture contained in the hulls and 68-91% in the seed itself.

Julian F. Smith

L 12892-66 EWP(e)/EWT(m)/EWP(b) WH

ACC NR: AT6000482

SOURCE CODE: UR/0000/65/000/000/0144/0146

AUTHOR: Matveyev, M. A.; Mazo, Zh. E.; Volkodotov, A. F.; Volchek, L. K.

ORG: None

TITLE: Effect of aluminum oxide on the properties of glasses of certain alkali-free systems

SOURCE: Vsesoyuznoye soveshchaniye po stekloobraznomu sostoyaniyu. 4th, Leningrad, 1964. Stekloobraznoye sostoyaniye (Vitreous state); trudy soveshchaniya. Leningrad, Izd-vo Nauka, 1965, 144-146

TOPIC TAGS: glass property, silicate glass, alumina, coordination chemistry

ABSTRACT: A study of the properties of glasses in the systems $\text{CaO-SrO-Al}_2\text{O}_3\text{-SiO}_2$ and $\text{MnO-CaO-SrO-Al}_2\text{O}_3\text{-SiO}_2$ showed that the composition-property curves have an inflection point at a certain content of Al_2O_3 . Glass of composition corresponding to this inflection point has many valuable properties (water resistance, high elastic modulus E , fast crystal growth rate). Anomalous effects of Al_2O_3 on glass properties were also observed in the systems $\text{MgO-Al}_2\text{O}_3\text{-SiO}_2$ and $\text{SrO-Al}_2\text{O}_3\text{-SiO}_2$. The role of Al_2O_3 is a dual one, since it improves the properties up to a certain content, then lowers them. This behavior is attributed to a change in the coordination of Al^{3+} in alkali-free vitreous systems as their basicity increases, and the corresponding structural interpretation is given to account for changes in crystallizing tendency, chemical stability, and elastic modulus. Analysis of changes in

Card 1/2

L 12892-66

ACC NR: AT6000482

the molar volume with the composition confirmed the hypothesis that the coordination number of aluminum ion changes from four to six (its structure changes from tetrahedral to octahedral). Orig. art. has: 3 figures.

SUB CODE: 07, 11 / SUBM DATE: 22May65 / ORIG REF: 007

Card 2/2

HW

MATVEYEV, M.A.; MAZO, E.E.; VOLKODATOV, A.F.

Effect of some factors on the modulus of elasticity of
glass fiber. Zhur. VKHO 8 no.5:584-586 '63.

(MIRA 17:1)

1. Institut obshchey neorganicheskoy khimii AN BSSR.

MATVEYEV, M. A.; MAZO, E. E.; VOLCHEK, L. K.; ORLOVA, V. M.; VOLKODATOV, A. F. ✓

"Effect of aluminum oxide on properties of glasses of some non-alkaline silicate systems."

report submitted for 4th All-Union Conf on Structure of Glass, Leningrad, 16-21 Mar 64.

VOLKODATOV, A. F.

31410

S/081/62/000/002/070/10.
B150/B101

15.2125
AUTHORS: Bezborodov, M. A., Mazo, E. E., Iodo, S. S., Orlova V. M.,
Volchek, L. K., Volkodotov, A. F.
TITLE: Synthesis of glasses for glass fiber in the system SrCaAlSiO
PERIODICAL: Referativnyi zhurnal. Khimiya, no. 2, 1962, 378, abstract
2K241 (Dokl. AN BSSR, v. 5, no. 7, 1961, 304 - 307)

TEXT: The field of vitrification was studied and developed in the system
SrCaAlSiO considered as a triangle in the angles of which are situated Al_2O_3 ,
 SiO_2 and SrO + CaO in definite proportions. Three variants of the system
were investigated with the ratios CaO:SrO (in mole %) equalling 10; 1.23,
and 1.85. It was established that glasses of the SrCaAlSiO system are
suitable for the production of glass fiber. [Abstracter's note: Complete
translation.]

Card 1/1

ACCESSION NR: AP4040682

S/0072/64/000/006/0009/0012

AUTHOR: Matveyev, M. A. (Doctor of technical sciences); Mazo, E. E. (Candidate of technical sciences); Volkodanov, A. F. (Engineer)

TITLE: Influence of Al_2O_3 on some properties of glass in the $MgO-Al_2O_3-SiO_2$ system

SOURCE: Steklo i keramika, no. 6, 1964, 9-12

TOPIC TAGS: alumina containing glass, glass elasticity modulus, Al_2O_3 , glass property, magnesium oxide, physico chemical property

ABSTRACT: Because of the advantageous physico-chemical properties of the above glasses, their chemical stability, low thermal expansion coefficient, and insulating properties have been much studied. The authors amplify these studies including the investigation of the elasticity modulus. The samples were prepared at 1630C. The area of vitrification in the state diagram applies to a composition containing 47.5-60% SiO_2 , 10-20% Al_2O_3 , and 25-40% MgO . At 45% SiO_2 , independent of the Al_2O_3 content, all glasses crystallize. Melting and clarifying of glasses with 45-50% silica contents already takes place at 1530C. The majority of glasses belong to the cordierite type. Those of the mullite type are highly viscous and have valuable properties. The elasticity modulus was determined with the

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ACCESSION NR: AP4040682

aid of ultrasonic resonance. All these glass types show high values of the elasticity modulus (between 10000 and 11000 kg/mm², compared with 4000-7000 kg/mm² for ordinary glass). The basic component enhancing the elasticity modulus is magnesium oxide. Conversely, higher SiO₂ content lowers the elasticity modulus. In this respect, Al₂O₃ plays a dual role, its optimum content being 15 mol%. The same applies to titanium. The capacity of these elements to change their coordination numbers explains this phenomenon. Orig. art. has: 6 figures,

ASSOCIATION: Institut obshchey i teoreticheskoy khimii AN SSSR
(Institute of General and Theoretical Chemistry, AN SSSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: .MT

NR REF SOV: 006

OTHER: 008

Card 2/2

L 17619-66 EWP(e)/EWT(m)/EWP(j)/ETC(m)-6 WW/RM/WH
 ACC NR: AP6007679 SOURCE CODE: UR/0413/66/000/003/0049/0049

INVENTOR: Mazo, E. E.; Matveyev, M. A.; Ushakova, L. K.; Iodo, S. S.; Orlova, V. M.;
Volkodatov, A. F.; Levinbaum, B. M.

ORG: none

TITLE: Glass for glass fiber. Class 32, No. 179458

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1966, 49

TOPIC TAGS: glass fiber, electric insulator

ABSTRACT: An Author Certificate has been issued for a glass for making glass fiber with improved electrical insulation properties and reduced cost. The glass has the following composition: SiO_2 , 54—57%; Al_2O_3 , 8—9%; CaO , 13—17%; SrO , 13—17%; MgO , not over 3.5%; and, in addition, BaO , 1.5—5%, and Fe_2O_3 , not over 1.5%. [B0]

SUB CODE: 11/ SUBM DATE: 07Dec64/ ATD PRESS: 4210

Card

1/1 7195

UDC: 666.189.212

L 05282-67 EWT(m)/EWP(s) WH/GD

ACC NR: AT6027137

SOURCE CODE: UR/0000/65/000/000/0063/0067

AUTHOR: Matveyev, M. A.; Mazo, E. E.; Volkodanov, A. F.; Volchek, L. K.

ORG: none

TITLE: Effect of ionic radii M^{2+} on the properties of glasses

SOURCE: AN SSSR. Otdeleniye obshchey i tekhnicheskoy khimii. Issledovaniya v oblasti khimii silikatov i okislov (Studies in the field of chemistry of silicates and oxides). Moscow, Izd-vo Nauka, 1965, 63-67

TOPIC TAGS: beryllium compound, silicate glass, glass property

ABSTRACT: The systems $RO-Al_2O_3-SiO_2$, where $RO = SrO, MgO$ or BeO , were studied in the following concentration range of the components (mole %): SiO_2 , 45-60; Al_2O_3 , 0-20; RO , 20-55. The temperature of the upper crystallization limit, chemical stability, and elastic modulus were determined in glasses of the $SrO-Al_2O_3-SiO_2$, $MgO-Al_2O_3-SiO_2$, and $MgO-BeO-Al_2O_3-SiO_2$ systems. Comparison of the results shows that these properties change in regular fashion with the cationic radius of the divalent oxide. As the latter decreases, the temperature at which the glasses are melted and their crystallizability, chemical stability and elastic modulus increase. The Be^{2+} ion has the strongest force field and the smallest difference of force fields with silicon (0.7) as compared to Mg^{2+} (1.12) and Sr^{2+} (1.30). This explains the marked crystallizability of beryllium glasses observed in this study, and also the higher T_g of magnesium glasses

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L 06282-67

ACC NR: AT6027137

as compared to strontium glasses. As the ionic radii decrease and the force fields of Me^{2+} increase, the influence of Me^{2+} on the packing and rigidity of the glass structure grows, causing a rise in the fusion temperature and in the elastic modulus. The decrease in the cationic radius also increases the chemical stability, since the size of the cations washed out of the glass determines the porosity, and hence, the protective effect of the film formed on the glass during reactions with corrosive agents. Orig. art. has: 4 figures and 2 tables.

SUB CODE: 11/ SUBM DATE: 13Feb64/ ORIG REF: 008/ OTH REF: 001

Card

2/2

VOLKOV, M. V.

Care of pigs in summer quarters and on pasture. Moskva, Gos. izd-vo sel'skhoz. lit-ry, 1952. 73 p. (73-1077)

3F396.R9V6

1. Swine - Feeding and feeding stuffs.

L 12130-66 EWT(1)/FCC GW

ACC NR: AT5028663

SOURCE CODE: UR/2633/65/000/019/0172/0184

AUTHOR: Volkodav, V. I.

ORG: Far Eastern Scientific Research Hydrometeorological Institute, Vladivostok
(Dal'nevostochnyy nauchno-issledovatel'skiy gidrometeorologicheskii institut)

TITLE: Characteristics of tropopause above the Trans-Baykal region

SOURCE: Vladivostok. Dal'nevostochnyy nauchno-issledovatel'skiy
gidrometeorologicheskii institut. Trudy, no. 19, 1965. Voprosy aerologii i
sinopticheskoy meteorologii (Problems in aerology and synoptic meteorology), 172-184

TOPIC TAGS: tropopause, ~~stratosphere~~ wind velocity,
stratosphere, atmospheric stratification

ABSTRACT: Data collected by 6 aerological stations of Trans-Baykal UGMS during 1956-60 served as basis for a study of the tropopause and the relationship of the tropopause altitude to the level of the maximal wind velocity. Total number of the ascents was 19,542. The soundings were taken above 15 km at 3 a.m. and 3 p.m. (Moscow time). Depending upon the shape of the stratification curve, three single-layer types and one multi-layer type of tropopause were differentiated. The first three recurred in 94-100% of the year. The most common is type III, characterized by a layer of great vertical force and irregular changes in temperature. Frequency of type I (in which there is a direct transition of troposphere to stratosphere)

Cont 1/2

UDC: 551.510.5 (571.51/55)

L 12130-66

ACC NR: AT5028663

increases during winter and spring to 40-45%. Type II (in which the transition from troposphere to stratosphere is achieved via an inversion layer) is prevalent during the summer (about 60% in the north, 45% in the south). During the winter, the geographic differences in average altitude of tropopause consist of about 1 km, while in the summer they are reduced to 0.2-0.4 km. Annual amplitude of the average monthly wind velocity is 15 m/sec for tropopause over northern and southern regions, 12 m/sec over eastern areas, and 10 m/sec in the central area. Difference between the altitude of tropopause and the level of the maximal wind velocity varies greatly with the seasons. The basic factors determining the abnormally low and high location of the tropopause above the Trans-Baykal are, correspondingly, invasion of upper and middle troposphere by cold air masses from higher latitudes and escape of warm air from subtropical latitudes. Orig. art. has: 8 tables and 4 figures.

SUB CODE: 04/

SUBM DATE: none

HW

Card 2/2

VOIKODAV, V.V., inzh. (g.Belovo)

New developments in combining trains. Zhel.dor.transp.
42 no.4:76-77 Ap '60. (MIRA 13:7)

1. Zamestitel' nachal'nika Belovskogo otdeleniya Tomskoy
dorogi.
(Railroads--Making up trains)

VOLKODAVOV, V.F.

Boundedness of compact sets in K-spaces. Uch.zap.Kuib.gos.ped.inst.
no.29:67-71 '59. (MIRA 14:8)
(Aggregates) (Spaces, Generalized)

VOLKODAVOV, V.F.; MOSOV, V.A. (Kuybyshev)

The local extremum principle for a hyperbolic equation with
constant coefficients. Volzh. mat. sbor. no.1:226-228 '63.
(MIRA 19:1)

VOLKOGON, G.

Development of creative activity. MTO no.12:45 D '59 (MIRA 13:3)

1. Uchenyy sekretar' pervichnoy organizatsii Nauchno-tekhnicheskogo obshchestva Kolomenskogo teplovozostroitel'nogo zavoda po pbra-
botke tsvetnykh metallov, g. Orsk, Orenburgskoy oblasti.
(Orsk--Nonferrous metals industries)

Volkogon, G.M.

32-11-27/60

AUTHORS: Volkogon, G.M., Smirnova, G.D., Pogov, V.I.

TITLE: The Spectral Method for the Determination of the Content of Iron, Manganese, Magnesium, Silicon, and Lead in the "Melchior" of the Type MH-19 (Spektral'nyy metod opredeleniya zheleza, margantsa, magniya, kremniya i svintsa v mel'khiore marke MH-19)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 11, pp. 1337-1338 (USSR)

ABSTRACT: Quantitative determinations were carried out in this case by the method of 3 standard gauged samples. The sample was taken out of the melt in the foundry and was cast into a conical bolt of 10 mm and 14 mm diameter (at the ends) and of 50 mm length by filling a special mold. This bolt was polished at its thinner end and was used as lower electrode. The upper electrode was made from spectrally pure carbon and was of conical shape, with 6 mm and 2 mm diameters at the ends. The following devices were used for spectral analysis: A spectrograph type "NC-22" and an alternating current arc lamp "NC-39" as well as films "Spektral" type 1. Spectrophotographs were made in 2 series: one for the determination of silicon, magnesium, and lead, and a second for iron and manganese. Photometrization was carried out on the micro-photometer "Mφ-2". Standards were cast and prepared in the same

Card 1/2

32-11-27/60

The Spectral Method for the Determination of the Content of Iron, Manganese, Magnesium, Silicon, and Lead in the "Melohior" of the Type MEI-19

manner as the above described sample. The prepared mixtures for standards were tested spectrographically and by chemical analysis. The results obtained by this method were compared with those obtained by methods which were already known, and agreement was found to be satisfactory. There are 1 figure and 1 table.

AVAILABLE: Library of Congress

Card 2/2

VOLKOGON, G.M.; PRIMATOVA, L.V.

Effect of the testing rate on mechanical properties of some
nonferrous metals and alloys. Zav.lab. 25 no.2;196-197 ' 59.
(MIRA 12:3)

1. Orskiy zavod po obrabotke tsvetnykh metallov.
(Nonferrous metals--Testing)

SOV/32-25-2-34/78

14(11)

AUTHORS:

Volkogon, G. M., Primatova, L. V.

TITLE:

Effect of the Investigation Velocity on the Mechanical Properties of Some Non-Ferrous Metals and Alloys (Vliyanie skorosti ispytaniya na mekhanicheskiye svoystva nekotorykh tsvetnykh metallov i splavov)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 2, pp 196 - 197 (USSR)

ABSTRACT:

It has already been mentioned in publications that an increase in the deformation velocity leads to an increase of the resistance values (Refs 1-4). Respective data on the effect of the deformation velocity in the straining of copper, nickel, copper/nickel and copper/zinc alloy plates not yet investigated are given in the present case. The properties of the materials investigated are mentioned (Table). The static investigations were carried out in the breaking machine IM-12 A at 22 different velocities (from 2 to 470 mm/min). Based on the data obtained, a diagram of the dependence of the investigation rate on the idling speed of the investiga-

Card 1/2

Effect of the Investigation Velocity on the Mechanical
Properties of Some Non-Ferrous Metals and Alloys

SOV/32-25-2-34/78

tion apparatus (Fig 1) was plotted. A linear function between the two velocities was observed. The resistance limit of the investigated materials (copper M-1, a brass L 68, commercial brass L 62, nickel N-1 and cupronickel MN-19) does not change within a velocity interval of 2 to 40 mm/min. Thus, a neutral gear of the investigation apparatus up to 40 mm/min (instead of 20 mm/min according to GOST 1497-42) is proposed in accordance with F. F. Pedanov's data (Ref 5). The investigation velocity for nickelplate can be increased to 180 mm/min. There are 2 figures, 1 table and 5 Soviet references.

ASSOCIATION: Orskiy zavod po obrabotke tsvetnykh metallov (Orsk Plant for Non-Ferrous Metal Processing)

Card 2/2

AUTHOR: Volkogon, G.M.

SOV/136-59-1-22/24

TITLE: Reviews and Bibliography (Retsenzii i bibliografiya)

PERIODICAL: Tsvetnyye Metally, 1959, Nr 1, pp 97-98 (USSR)

ABSTRACT: The following book is reviewed:

N.Z. Dnestrovskiy and S.N. Pomerantsev "Brief Handbook
on the working of Non-Ferrous Metals and Alloys",
Metallurgizdat, 1958.

Card 1/1

VOIKOGON, G.M., PRIMATOVA, L.V.

Relation between the limit of the resistance to rupture
and the hardness at high temperatures. Zav.lab. 26 no.7:
858-859 '60. (MIRA 13:7)

1. Orskiy zabod po obrabotke tsvetnykh metallov.
(Metals--Testing)

VOLEKON, G.M.

Central laboratory of the Orsk plant for processing
nonferrous metals. Zav.lab. 26 no.7:902-903 '60.

(MIRA 13:7)

1. Nachal'nik Tsentral'noy laboratorii Orskogo zavoda
po obrabotke tsvetnykh metallov.
(Orsk--Nonferrous metals)

VOLKOGON, G.M.; BELOV, A.V.

"Induction furnaces for metal and alloy smelting" by S.A. Farbman,
I.F. Keleboev. Reviewed by G.M. Volkogon, A.V. Belov. TSvet. met.
31 no.9:78-79 S '58. (MIRA 11:9)
(Nonferrous metals--Electrometallurgy) (Induction heating)

VOLKOGON, G.M.

"Brief handbook on the working of nonferrous metals and alloys"
by N.Z. Dnestrovskii, S.N. Pomerantsev. Reviewed by G.V. Volkogon.
TSvet. met. 32 no.1:97-98 Ja '59. (MIRA 12:1)
(Nonferrous metals) (Metalwork)

SO7/32-25-5-48/56

28(5)

AUTHOR:

Volkogon, G. M.

TITLE:

On the Problem of Temperature Measurement in Mechanical Heat Tests (K voprosu ob izmerenii temperatur pri goryachikh mekhanicheskikh ispytaniyakh)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 5, p 631 (USSR)

ABSTRACT:

In connection with the investigation of nickel- and copper plasticity a series of tests was carried out in order to define the dependence of temperature measurements on the difference of the optical properties between the thermocouple and the samples. The methods used had already been described (Ref 1). The temperature difference was found by means of a differential chrome Alumel thermocouple, a contact (corresponding to the sample to be investigated) being screened by a nickel- or copper foil. The tests were carried out by means of a potentiometer of the type PPTV-1. For heating the samples two types of furnaces were used - one had a nickel screen (thickness: 0.3mm) between sample and heating body, the other had no screen at all. It was found that in the first case the error of temperature measurement is 5 - 7° in the case of copper samples and 2 - 4°

Card 1/2

SOV/32-25-5-16/56

On the Problem of Temperature Measurement in Mechanical Heat Tests

at a maximum in the case of nickel samples, whereas with unscreened heating the error of measurement is 28 - 30° in the case of copper samples and 18 - 20° in the case of nickel samples. Thus it has been found that the point of contact of the thermocouple and the corresponding part of the sample have to be carefully screened in order to obtain more precise measurement results in mechanical heat tests. There is 1 Soviet reference.

ASSOCIATION: Orskiy zavod po obrabotke tsvetnykh metallov (Orsk Plant for the Processing of Non-Ferrous Metals)

Card 2/2

VOLKOGON, G.M.

Relationship between the shape of the specimens and the mechanical properties of copper and brass. Zav.lab. 26 no.1:125-126 '60.
(MIRA 13:5)

1. Orskiy zavod tsvetnykh metallov.
(Copper--Testing) (Brass--Testing)

18. P200

80199
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E073/E535

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TITLE: Influence of the Speed of Deformation on the Mechanical Properties of Nickel at Elevated Temperatures

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ABSTRACT: The results are given of tensile tests on nickel specimens with various deformation speeds carried out at temperatures between 20 and 1100°C using impact and static loading. For the investigations NPA-1 nickel was used (0.015% Cu, 0.085% Fe, 0.0033% Si, 0.0025% S, 0.065% Mg). From hot rolled blanks cylindrical 6 mm dia., 60 mm long specimens were prepared. The static tests were carried out on an IM-12A test machine at fourteen different speeds between 2 and 460 mm/min. At elevated temperatures the specimens were heated, together with the clamping arrangement, inside a tubular electric furnace. The tensile impact tests were made with a special pendulum impact testing machine, Card 1/3 whereby the specimens were heated with enclosed silicon

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carbide heaters and held at the particular test temperature for 15 mins. Special attention was paid to exact measurement of the temperature. In the first instance the specimens were tested at 20, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000 and 1100°C with the following three deformation speeds: 2 mm/min, 300 mm/min and 1 m/sec. Fig 1 shows the results of plasticity measurements (transverse contraction) as a function of the temperature and the deformation speed. Changes in the speed of stretching had practically no influence on the relative contraction up to about 350°C but it did have an influence at higher temperatures; specimens stretched at a speed of 2 mm/min had the lowest contraction (37%) at 700°C, whilst the same material showed a contraction of 76% in the case of impact loading. The hot brittleness zone of nickel is most pronounced in the case of deformation speeds of 2 mm/min and decreases appreciably with increasing deformation speed. The influence of heating

Card 2/3 duration at 1000°C and of the speed of deformation on the

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mechanical properties of nickel at 600 and 1000°C was also investigated and the results are given in a table on p 47. The heating duration does influence the tensile strength of the nickel; if the heating duration is increased from zero to 30 mins, the strength drops by 1.2 kg/mm². The results of tests at 600 and 1000°C at speeds of 2 and 460 mm/min are graphed in Fig 2. The obtained data appear to be the result of the two mutually competing processes of hardening and softening. The results of the here described investigations do not conform with the generally accepted view that with increasing speed of deformation the plasticity of the metal decreases. There are 2 figures, 1 table and 2 Soviet references.

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BROVMAN, M.Ya.; RIMEN, V.Kh.; BELOV, Ye.M.; KRYLOV, A.P.; VOLKOGON, G.M.

Investigation of electric power parameters in the rolling of nonferrous metals. TSvet. met. 34 no.8:60-65 Ag '61. (MIRA 14:9)

1. Yuzhno-Ural'skiy zavod tyazhelogo mashinostroyeniya (for Brovman, Rimen, Belov).
 2. Orskiy zavod obrabotki tsvetnykh metallov (for Krylov, Volkogon).
- (Rolling (Metalwork)) (Nonferrous metals)